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THE PLANT DISEASE BULLETIN

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THE PLANT DISEASE SURVEY

Supplement 24

Crop Losses from Plant Diseases in the United States in 1921

November 1, 1922.

BUREAU OF PLANT INDUSTRY

UNITED STATES DEPARTMENT OF AGRICULTURE

IN 1921

Supplement 24 November 1, 1922

CONTENTS

Wheat..... 490	Oats..... 496	Sweet potato. 504	Cotton..... 507
Rye..... 492	Corn..... 498	Tomato..... 505	Apple..... 508
Barley..... 494	Potato..... 500	Dry bean..... 506	Peach..... 510

INTRODUCTORY STATEMENT

The accompanying tabulations constitute the fifth annual set of crop loss estimates made by the plant pathologists of the country and assembled and issued from the Plant Disease Survey. As usual, these estimates are for a few of the most important crops and include the losses from plant diseases only, the depredations of insects or crop failures from weather factors not being considered.

These estimates represent the losses as seen from the viewpoint of the plant pathologist. They are not made from the point of view of the farmer who is not familiar with diseases and who is inclined to overlook them as a factor in reducing yield and ascribe all crop troubles to the weather. It may be argued that the plant pathologist is naturally liable to overestimate rather than to underestimate the importance of plant diseases as a factor in reducing yield. However, it is believed that all persons who have furnished estimates, or who have taken part in the preparation of them, have tried to be impartial and when in doubt have erred on the conservative rather than the extreme side.

As has been said before, no claim is made that these figures are accurate. At best the estimates of losses from disease are guesses, as are also estimates of the yield of the crops themselves. However, they represent the combined judgment of the plant disease workers of the country, who, in our opinion, are most competent to judge. In some states collaborators had a considerable body of data on which to base their estimates, but in many cases this was lacking and so the plant pathologist was obliged to rely solely on his personal knowledge of conditions.

It is thought that these figures are reasonably reliable and that they represent fairly the relative importance of the various diseases in the different states and for the different years.

The methods of making these estimates have been explained in other Supplements of the Plant Disease Bulletin (Pl.Dis.Bul.Suppls. 6 and 12, 1919 and 1920).

Table 99. Estimated percentage losses to eleven crops from plant diseases in 1919, 1920, and 1921.

Crop	Percent loss			Crop	Percent loss		
	1919	1920	1921		1919	1920	1921
Wheat	16.96	11.70	9.2	Sweet potato	36.23	25.8	28.3
Rye	1.74	1.98	1.4	Dry bean	3.70	4.3	14.1
Barley	5.90	4.60	5.7	Cotton	13.59	13.4	15.8
Oats	5.90	4.80	8.6	Apple	11.37	16.5	11.3
Corn	6.41	6.39	8.8	Peach	12.04	19.4	15.3
Potato	19.50	21.70	18.6				

WHEAT

Estimated reduction in yield of wheat due to scab (*Fusarium* sp.), leaf rust (*Puccinia triticina*), stem rust (*Puccinia graminis*), bunt (*Tilletia laevis* and *T. tritici*), loose smut (*Ustilago tritici*), and other diseases, 1921.

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to diseases																	
		Scab		Leaf rust		Stem rust		Bunt		Loose smut		Other diseases		All diseases					
		%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)		
Me.	187	0	0	-	-	0	0	0	0	-	-	-	-	-	-				
Vt.	126	0	0	0	0	2.	3	0	0	2.	3	-	-	4.	6				
Mass.	-	0	0	0	0	*	-	0	0	-	-	-	-		+				
R. I.	-	0	0	*	-	0	0	0	0	-	-	-	-		+				
N. Y.	8,747	t	+	3.	279	t	+	t	+	1.5	140	1.5	140	6.	+	559+			
N. J.	1,539	t	+	10.	177	0	0	t	+	2.	35	1.	18	13.	+	230+			
Pa.	23,850	t	+	2.	517	t	+	.7	181	3.	775	2.	517	7.7	+	1,990+			
Del.	1,300	.5	7	3.	41	t	+	.5	7	1.	14	.5	7	5.5	+	76+			
Md.	7,952	2.	183	6.	549	t	+	1.	91	3.	274	1.	91	13.	+	1,188+			
Va.	8,301	t	+	5.	461	1.	92	.5	46	2.5	231	1.	92	10.	+	922+			
W. Va.	3,125	2	70	5.	176	t	+	t	+	3.	105	1.	35	11.	+	386+			
N. C.	4,500	*	-	20.	1,149	-	-	.7	41	t	+	1.	57	21.7	+	1,247+			
S. C.	1,298	0	0	2.	27	1.	14	t	+	0	0	1.	14	4.	+	55+			
Ga.	1,449	0	0	3.	47	1.	16	1.	16	2.	32	2.	32	9.		143			
Ohio	28,697	7.	2,483	4.	1,419	6.	2,128	.1	35	1.	355	1.	355	19.1		6,775			
Ind.	24,192	.5	138	7.	1,935	1.	277	t	+	3.	829	1.	277	12.5	+	3,456+			
Ill.	45,234	4.	1,999	1.	500	.5	250	t	+	3.	1,499	1.	500	9.5	+	4,748+			
Mich.	14,072	0	0	*	-	5.	791	1.	158	5.	791	t	+	11.	+	1,740+			
Wis.	2,812	.5	16	t	+	10.	321	0	0	t	+	2.	64	12.5	+	401+			
Minn.	24,943	1.	282	t	+	7.	1,973	t	+	.5	141	3.	845	11.5	+	3,241+			
Iowa	10,102	t	+	t	+	10.	1,135	t	+	1.	114	-	-	11.	+	1,249+			
Mo.	34,462	t	+	*	-	t	+	t	+	t	+	-	-		+				
N. D.	73,264	5.	4,696	3.	2,818	10.	9,393	.5	470	.5	470	3.	2,818	22.		20,665			
S. D.	25,980	1.	317	5.	1,584	10.	3,168	t	+	t	+	2.	634	18.	+	5,703+			

State	Production 1921 Bushels (000 omitted)	Scab %	Scab Bushels (000 omitted)	Leaf rust %	Leaf rust Bushels (000 omitted)	Stem rust %	Stem rust Bushels (000 omitted)	Bunt %	Bunt Bushels (000 omitted)	Loose smut %	Loose smut Bushels (000 omitted)	Other diseases %	Other diseases Bushels (000 omitted)	All diseases %	All diseases Bushels (000 omitted)
Nebr.	59,875	t	+	*	-	t	+	1.5	912	-	-	-	-	1.5+	912+
Kans.	128,695	t	+	1.	1,341	t	+	1.	1,341	t	+	2.	2,681	4. +	5,363+
Ky.	6,340	0	0	-	-	t	+	t	+	4.	264	-	-	4. +	264+
Tenn.	4,500	t	+	10.	514	1.5	77	t	+	t	+	1.	52	12.5+	643+
Ala.	210	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Miss.	84	0	0	3.	3	0	0	0	0	1.	1	-	-	4.	4
Texas	20,810	0	0	t	+	t	+	4.	876	*	-	1.	219	5. +	1,095+
Okla.	47,325	0	0	5.	2,674	t	+	3.	1,604	1.5	802	2.	1,070	11.5+	6,150+
Ark.	958	t	+	5.	55	t	+	3.	33	3.	33	2.	22	13. +	143+
Mont.	28,168	0	0	1.	316	2.5	791	4.	1,266	1.5	475	2.	633	11.	3,481
Wyo.	3,424	-	-	-	-	*	-	-	-	-	-	-	-	+	+
Colo.	23,239	*	-	-	-	t	+	2.	474	t	+	-	-	2. +	474+
N.Mex.	3,088	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ariz.	840	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Utah	6,299	0	0	.2	13	.8	51	t	+	1.	64	t	+	2. +	128+
Nev.	493	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Ida.	27,079	0	0	.5	147	1.	294	4.	1,177	1.5	442	1.	294	8.	2,354
Wash.	54,662	0	0	t	+	t	+	3.	1,708	t	+	1.	569	4. +	2,277+
Ore.	24,317	0	0	t	+	t	+	2.	501	t	+	1.	251	3. +	752+
Calif.	8,355	0	0	2.	202	15.	1,519	.5	51	t	+	-	-	17.5+	1,772+
U. S.	794,893	1.2	10,191	1.9	16,944	2.5	22,293	1.3	10,988	.9	7,889	1.4	12,287	9.2	80,592

Estimated reduction in yield due to disease

RYE

Estimated reduction in yield of rye due to smut (Ustilago sp.), ergot (Claviceps purpurea), leaf rust (Puccinia dispersa), stem rust (Puccinia graminis), and other diseases, 1921.

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to disease															
		Smut		Ergot		Leaf rust		Stem rust		Other diseases		All diseases					
		%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)		
N. H.	-	t	+	0	0	0	0	0	0	-	-	+	+				
Vt.	-	0	0	0	0	*	-	1	+	-	-	1.	+	+			
Mass.	30	0	0	0	0	-	-	-	-	-	-	-	-	-			
R. I.	-	0	0	*	-	-	-	*	-	-	-	-	+	+			
Conn.	95	0	0	*	-	*	-	0	0	-	-	-	+	+			
N. Y.	806	t	+	t	+	2.	16	t	+	t	+	+	2.	+	16+		
N. J.	998	0	0	0	0	-	-	-	-	-	-	-	-	-			
Pa.	3,008	t	+	t	+	t	+	-	-	-	-	-	+	+			
Del.	44	0	0	-	-	.5	.2	*	-	-	-	.5	+	.2+			
Md.	238	t	+	0	0	1.	2	t	+	-	-	1.	+	2+			
Va.	418	t	+	t	+	2.	9	t	+	1.	4	3.	+	13+			
W. Va.	120	t	+	*	-	*	-	*	-	1.	1	1.	+	1+			
N. C.	273	-	-	-	-	-	-	-	-	-	-	-	-	-			
S. C.	50	-	-	0	0	*	-	0	0	1.	1	1.	+	1+			
Ga.	108	t	+	0	0	3.	3	2.	2	-	-	5.	+	5+			
Ohio	1,079	-	-	*	-	3.	34	1.	11	1.	11	5.	+	56+			
Ind.	3,978	t	+	*	-	1.	41	t	+	3.	124	4.	+	165+			
Ill.	3,349	-	-	t	+	t	+	t	+	.5	17	.5	+	17+			
Mich.	8,346	t	+	t	+	t	+	1.	85	.5	42	1.5	+	127+			
Wis.	4,756	t	+	t	+	t	+	t	+	1.	48	1.	+	48+			
Minn.	10,185	.5	52	1.	104	t	+	t	+	1.	104	2.5	+	260+			
Iowa	515	1.5	8	1.	5	1.	5	*	-	-	-	3.5	+	18+			
Mo.	280	-	-	*	-	-	-	0	0	-	-		+	+			

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to diseases: Smut %	Smut Bushels (000 omitted)	Ergot %	Ergot Bushels (000 omitted)	Leaf rust %	Leaf rust Bushels (000 omitted)	Stem rust %	Stem rust Bushels (000 omitted)	Other diseases %	Other diseases Bushels (000 omitted)	All diseases %	All diseases Bushels (000 omitted)
N. D.	9,306	0	0	1.	94	t	+	t	+	-	-	1. +	94+
S. D.	3,056	0	0	t	+	t	+	t	+	t	+	+	+
Nebr.	1,714	0	0	*	-	*	-	*	-	-	-	+	+
Kans.	1,138	0	0	0	0	*	-	t	+	-	-	+	+
Ky.	180	0	0	t	+	t	+	0	0	1.	2	1. +	2+
Tenn.	152	0	0	0	0	1.	1.5	*	-	1.	1.5	2. +	3+
Ala.	12	0	0	-	-	-	-	-	-	-	-	-	-
Texas	156	-	-	0	0	0	0	t	+	-	-	5. +	#8+
Okla.	408	0	0	-	-	-	-	-	-	-	-	-	-
Ark.	9	0	0	*	-	0	0	*	-	-	-	+	+
Mont.	590	0	0	0	0	0	0	0	0	-	-	-	-
Wyo.	315	0	0	-	-	0	0	0	0	-	-	-	-
Colo.	1,058	0	0	0	0	0	0	0	0	-	-	-	-
Utah	140	0	0	t	+	0	0	0	0	-	-	+	+
Idaho	160	0	0	0	0	0	0	0	0	.5	1	.5	1
Wash.	294	0	0	*	-	t	+	0	0	t	+	+	+
Ore.	554	0	0	t	+	t	+	0	0	0	0	+	+
U. S.	57,918	.1	60	.3	203	.2	112	.2	98	.6	357	1.4	838

Texas - Loss estimated only for "all diseases".

BARLEY

Estimated reduction in yield of barley due to stripe (Helminthosporium gramineum), loose smut (Ustilago nuda), covered smut (Ustilago hordei), leaf rust (Puccinia simplex), stem rust (Puccinia graminis), and other diseases, 1921.

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to disease																			
		Stripe		Loose smut		Covered smut		Leaf rust		Stem rust		Other diseases		All diseases							
		%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)						
Me.	104	-	-	-	-	-	-	0	0	-	-	-	-	-	-						
N. H.	23	-	-	-	-	-	-	0	0	-	-	-	-	-	-						
Vt.	200	-	-	1.5	3	1.5	3	*	-	1.	2	-	-	4.	8						
Conn.	-	-	-	t	+	t	+	0	0	-	-	-	-	+	+						
N. Y.	3,318	t	+	1.	34	1.	34	*	-	t	+	-	-	2.	68+						
Pa.	280	t	+	4.5	13	-	-	t	+	-	-	-	-	4.5+	13+						
Md.	120	t	+	*	-	*	-	0	0	-	-	-	-	+	+						
Va.	207	t	+	5.	11	2.	4	t	+	0	0	0	0	7.	15+						
S. C.	-	t	+	-	-	-	-	0	0	-	-	-	-	+	+						
Ohio	2,037	-	-	*	-	*	-	0	0	-	-	-	-	-	-						
Ind.	1,235	t	+	-	-	-	-	0	0	-	-	-	-	+	+						
Ill.	4,550	t	+	.8	39	.4	19	*	-	5.	243	-	-	6.2+	301+						
Mich.	4,112	-	-	*	-	-	-	0	0	1.	42	1.	42	2.	84						
Wis.	10,642	t	+	.2	22	.2	22	t	+	1.	109	1.	109	2.4+	262+						
Minn.	17,720	2.	392	.5	98	1.	196	0	0	3.	587	3.	587	9.5	1,860						
Iowa	3,901	5.	245	2.	98	1.5	74	*	-	7.	344	5.	245	20.5	1,006						
Mo.	154	-	-	*	-	*	-	0	0	-	-	-	-	-	-						
N. D.	16,988	t	+	*	-	.2	34	t	+	t	+	.5	86	.7+	120+						
S. D.	17,323	2.	377	1.	188	t	+	t	+	2.	377	3.	565	8. +	1,507+						
Nebr.	4,915	t	+	*	-	*	-	*	-	*	-	t	+	+	+						
Kans.	13,200	0	0	1.	135	1.	135	*	-	t	+	-	-	2. +	270+						

State	Production: 1921 Bushels (000 omitted)	Estimated reduction in yield due to disease: Stripe %	Stripe Bushels (000 omitted)	Loose smut %	Loose smut Bushels (000 omitted)	Covered smut %	Covered smut Bushels (000 omitted)	Leaf rust %	Leaf rust Bushels (000 omitted)	Stem rust %	Stem rust Bushels (000 omitted)	Other diseases %	Other diseases Bushels (000 omitted)	All diseases %	All diseases Bushels (000 omitted)
Ky.	144	-	-	6.	9	3.	5	*	-	0	0	-	-	9. +	14+
Tenn.	189	t	+	2.	4	4.	8	t	+	t	+	1.	2	7. +	14+
Texas	1,872	-	-	*	-	2.	98	*	-	-	-	-	-	2.	98
Okla.	2,684	-	-	3.	85	.8	23	0	0	-	-	2.	57	5.8	165
Ark.	-	3.	+	15.	+	5.	+	0	0	-	-	-	-	23.	+
Mont.	1,200	0	0	2.	25	2.	25	*	-	0	0	0	0	4. +	50+
Wyo.	232	-	-	-	-	-	-	*	-	-	-	-	-	-	-
Colo.	4,444	t	+	t	+	t	+	*	-	t	+	-	-	+	+
N.Mex.	239	-	-	-	-	-	-	0	0	-	-	-	-	-	-
Ariz.	928	t	+	-	-	-	-	0	0	-	-	-	-	+	+
Utah	512	5.	27	-	-	*	-	0	0	-	-	-	-	5. +	27+
Nev.	187	-	-	-	-	-	-	0	0	-	-	-	-	-	-
Ida.	2,784	t	+	t	+	.5	14	0	0	t	+	1.	28	1.5+	42+
Wash.	2,797	t	+	t	+	t	+	t	+	*	-	t	+	.5+	14+
Ore.	2,240	t	+	t	+	t	+	t	+	*	-	t	+	.5+	11+
Calif.	29,700	-	-	*	-	*	-	*	-	*	-	10.	3,300	10. +	3,300+
U. S.	151,181	.6	1,041	.5	764	.4	694	-	-	1.1	1,704	3.1	5,021	5.7	9,249

OATS

Estimated reduction in yield of oats due to loose and covered smuts (*Ustilago avenae* and *U. levis*), stem rust (*Puccinia graminis*), crown rust (*Puccinia coronata*), and other diseases, 1921.

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to disease									
		Loose and covered smuts		Stem rust		Crown rust		Other diseases		All diseases	
		%	Bushels :000 omitted	%	Bushels :000 omitted	%	Bushels :000 omitted	%	Bushels :000 omitted	%	Bushels :000 omitted
Me.	4,340	-	-	-	-	-	-	-	-	-	-
N. H.	630	2.	13	*	-	0	0	-	-	2. +	13+
Vt.	2,673	2.5	71	1.	28	2.	57	-	-	5.5	156
Mass.	279	2.	6	-	-	*	-	-	-	2. +	6+
R. I.	28	2.	1	*	-	*	-	-	-	2. +	1+
Conn.	330	2.	7	0	0	*	-	-	-	2. +	7+
N. Y.	24,912	4.	1,049	t	+	t	+	1.	262	5. +	1,311+
N. J.	1,728	3.	57	3.	57	3.	57	-	-	9.	171
Pa.	35,283	2.5	924	*	-	1.	369	1.	369	4.3+	1,662+
Del.	168	2.	3	*	-	t	+	1.	2	3. +	5+
Md.	1,620	4.	68	0	0	t	+	-	-	4. +	68+
Va.	3,342	4.	141	0	0	1.	35	-	-	5.	176
W. Va.	4,620	4.	193	*	-	*	-	-	-	4. +	193+
N. C.	3,060	5.	161	*	-	0	0	-	-	5. +	161+
S. C.	8,112	7.	611	0	0	*	-	-	-	7. +	611+
Ga.	8,652	6.	583	1.	97	3.	292	1.	97	11.	1,069
Fla.	533	-	-	-	-	-	-	-	-	-	-
Ohio	37,122	1.5	589	1.	393	1.	393	2.	786	5.5	2,161
Ind.	45,072	3.	1,394	-	-	-	-	-	-	3.	1,394
Ill.	121,741	5.	7,423	t	+	3.	4,454	10.	14,847	18. +	26,724+
Mich.	28,101	2.5	812	10.	3,249	*	-	1.	325	13.5+	4,386+
Wis.	63,958	1.	663	.5	331	1.	663	1.	663	3.5	2,320
Minn.	94,176	3.	3,105	5.	5,174	t	+	1.	1,035	9. +	9,314+
Iowa	154,960	1.	1,589	*	-	1.5	2,384	-	-	2.5+	3,973+
Mo.	42,960	3.	1,329	*	-	*	-	-	-	3. +	1,329+

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to disease: Loose and covered smuts %	Loose and covered smuts Bushels (000 omitted)	Stem rust %	Stem rust Bushels (000 omitted)	Crown rust %	Crown rust Bushels (000 omitted)	Other diseases %	Other diseases Bushels (000 omitted)	All diseases %	All diseases Bushels (000 omitted)
N. D.	49,761	2.	1,016	*	-	*	-	-	-	2. +	1,016+
S. D.	58,300	2.	1,356	10.	6,779	2.	1,356	0	0	14.	9,491
Nebr.	70,054	2.	1,430	*	-	*	-	-	-	2. +	1,430+
Kans.	38,827	3.	1,339	t	+	t	+	10.	4,463	13. +	5,802+
Ky.	5,567	8.	512	0	0	*	-	5.	320	13. +	832+
Tenn.	5,330	1.	55	0	0	1.	55	1.	55	3.	165
Ala.	6,776	2.	138	-	-	*	-	-	-	2. +	138+
Miss.	2,940	2.	63	0	0	4.	125	-	-	6.	188
La.	1,265	1.	16	0	0	20.	320	-	-	21.	336
Texas	33,570	10.	4,937	t	+	20.	9,874	2.	987	32. +	15,798+
Okla.	35,300	6.	2,290	*	-	1.5	572	-	-	7.5+	2,862+
Ark.	6,600	10.	868	t	+	10.	868	4.	348	24. +	2,084+
Mont.	10,787	4.	459	1.	115	0	0	1.	115	6.	689
Wyo.	4,500	-	-	0	0	-	-	-	-	-	-
Colo.	6,727	-	-	0	0	*	-	-	-	+	+
N. Mex.	1,690	-	-	0	0	*	-	-	-	+	+
Ariz.	630	-	-	*	-	0	0	-	-	+	+
Utah	2,876	4.	120	*	-	-	-	-	-	4. +	120+
Nev.	113	-	-	-	-	-	-	-	-	-	-
Ida.	7,740	2.	161	0	0	0	0	2.	161	4.	322
Wash.	10,500	2.	214	*	-	0	0	-	-	2. +	214+
Ore.	8,704	.5	44	t	+	t	+	1.	88	1.5+	132+
Calif.	3,780	-	-	*	-	-	-	8.	329	8. +	329+
U. S.	1060,737	3.1	35,810	1.4	16,223	1.9	21,874	2.2	25,252	8.6	99,159

CORN

Estimated reduction in yield of corn due to smut (*Ustilago zeae*), leaf rust (*Puccinia sorghi*), Physoderma (*Physoderma zeae-maydis*), root and ear rots (*Fusarium* spp.) and other diseases, 1921.

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to disease: Smut %	Smut Bushels (000 omitted)	Leaf rust %	Leaf rust Bushels (000 omitted)	Physoderma %	Physoderma Bushels (000 omitted)	Root and ear rots %	Root and ear rots Bushels (000 omitted)	Other diseases %	Other diseases Bushels (000 omitted)	All diseases %	All diseases Bushels (000 omitted)
Me.	1,500	-	-	-	-	0	0	0	0	-	-	-	-
N. H.	1,325	*	-	-	-	0	0	0	0	-	-	+	+
Vt.	4,510	3.	139	-	-	0	0	0	0	-	-	3.	139
Mass.	3,120	.5	16	-	-	0	0	0	0	-	-	.5	16
R. I.	644	*	-	*	-	0	0	*	-	-	-	+	+
Conn.	3,848	1.5	59	-	-	0	0	*	-	1.	39	2.5+	98+
N. Y.	36,708	1.	390	*	-	0	0	5.	1,953	-	-	6. +	2,343+
N. J.	11,327	1.	135	*	-	0	0	15.	2,023	-	-	16. +	2,158+
Pa.	76,272	1.	852	*	-	0	0	8.	6,818	1.5	1,278	10.5+	8,948+
Del.	6,549	.5	36	*	-	0	0	10.	732	-	-	10.5+	768+
Md.	25,155	2.	572	-	-	0	0	10.	2,858	-	-	12.	3,430
Va.	47,600	2.	1,035	t	+	0	0	6.	3,104	0	0	8. +	4,139+
W. Va.	20,128	2.	411	*	-	-	-	*	-	-	-	2. +	411+
N. C.	49,254	20.	14,925	*	-	4.	2,985	10.	7,463	-	-	34. +	25,373+
S. C.	32,959	5.	1,831	*	-	3.	1,099	2.	732	-	-	10. +	3,662+
Ga.	69,975	2.	1,555	*	-	2.	1,555	6.	4,665	t	+	10. +	7,775+
Fla.	11,032	-	-	-	-	2.	225	*	-	-	-	2. +	225+
Ohio	159,326	3.	5,623	*	-	t	+	12.	22,493	t	+	15. +	28,116+
Ind.	169,848	.5	971	t	+	t	+	12.	23,293	-	-	12.5+	24,264+
Ill.	305,966	3.5	12,380	t	+	t	+	10.	35,372	-	-	13.5+	47,752+
Mich.	66,417	2.	1,398	t	+	0	0	3.	2,097	-	-	5. +	3,495+
Wis.	97,482	2.	2,010	t	+	0	0	1.	1,005	t	+	3. +	3,015+
Minn.	140,507	3.	4,346	*	-	0	0	t	+	-	-	3. +	4,346+
Iowa	444,190	1.5	6,799	t	+	0	0	.5	2,266	-	-	2. +	9,065+
Mo.	182,880	3.	5,656	*	-	0	0	*-	-	-	-	3. +	5,656+

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to disease: Smut %	Smut Bushels (000 omitted)	Leaf rust %	Leaf rust Bushels (000 omitted)	Physoderma %	Physoderma Bushels (000 omitted)	Root and ear rots %	Root and ear rots Bushels (000 omitted)	Other diseases %	Other diseases Bushels (000 omitted)	All diseases %	All diseases Bushels (000 omitted)
Iowa	444,190	1.5	6,799	t	+	0	0	*-	-	-	-	3. +	5,656+
Mo.	182,880	3.	5,656	*	-	0	0	*-	-	-	-	3. +	5,656+
N. D.	16,940	1.	171	*	-	0	0	t	+	-	-	1. +	171+
S. D.	125,632	15.	23,854	*	-	0	0	5.	7,951	1.	1,590	21. +	33,395+
Nebr.	207,732	*	-	*	-	0	0	-	-	-	-	+	+
Kans.	102,142	5.	6,008	t	+	t	+	10.	12,017	-	-	15. +	18,025+
Ky.	82,150	1.5	1,425	*	-	0	0	12.	11,396	-	-	13.5+	12,821+
Tenn.	90,713	2.	2,016	t	+	t	+	7.	7,055	1.	1,008	10. +	10,079+
Ala.	62,651	*	-	*	-	.5	315	*	-	-	-	.5+	315+
Miss.	57,096	1.	624	2.	1,248	.5	312	5.	3,120	-	-	8.5	5,304
La.	35,022	1.	403	1.	403	1.	403	10.	4,025	-	-	13.	5,234
Texas	156,920	3.	5,173	1.	1,724	-	-	*	-	5.	8,622	9. +	15,519+
Okla.	76,925	*	-	-	-	*	-	*	-	-	-	+	+
Ark.	60,148	4.	2,830	t	+	t	+	10.	7,076	1.	708	15. +	10,614+
Mont.	2,560	-	-	0	0	0	0	0	0	-	-	-	-
Wyo.	1,232	-	-	-	-	0	0	0	0	-	-	-	-
Colo.	15,979	2.5	410	*	-	0	0	0	0	-	-	2.5+	410+
N.Mex.	6,409	-	-	-	-	0	0	0	0	-	-	-	-
Ariz.	1,015	-	-	-	-	0	0	0	0	-	-	-	-
Utah	517	1.	5	-	-	0	0	0	0	-	-	1.	5
Nev.	29	-	-	-	-	0	0	0	0	-	-	-	-
Ida.	1,598	-	-	0	0	0	0	t	+	-	-	+	+
Wash.	2,400	1.	24	0	0	0	0	0	0	t	+	1. +	24+
Ore.	1,980	t	+	0	0	0	0	0	0	-	-	+	+
Calif.	4,060	10.	451	*	-	0	0	0	0	-	-	10. +	451+
U. S.	3,080,372	3.1	104,533	.1	3,375	.2	6,894	5.	169,514	.4	13,245	8.8	297,561

POTATO

Estimated reduction in yield of potatoes due to mosaic, leaf roll, late blight (*Phytophthora infestans*), Rhizoctonia (*Rhizoctonia solani*), and black leg (*Bacillus atrosepticus*), 1921.

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to disease									
		Mosaic		Leaf roll		Late blight		Rhizoctonia		Black leg	
		%	Bushels 000 omitted	%	Bushels 000 omitted	%	Bushels 000 omitted	%	Bushels 000 omitted	%	Bushels 000 omitted
Me.	37,152	-	-	-	-	.5	187	-	-	-	-
N. H.	2,240	-	-	-	-	t	+	-	-	-	-
Vt.	3,750	7.	318	5.	227	t	+	.5	23	-	-
Mass.	3,335	-	-	-	-	0	0	-	-	-	-
R. I.	345	-	-	-	-	0	0	-	-	-	-
Conn.	2,369	-	-	-	-	0	0	-	-	t	+
N. Y.	33,990	1.5	585	1.	389	.3	117	1.5	585	t	+
N. J.	9,025	5.	557	5.	557	-	-	3.	334	t	+
Pa.	21,586	1.	317	10.	3,174	5.	1,587	3.	953	t	+
Del.	500	.5	3	-	-	-	-	-	-	-	-
Md.	3,185	-	-	2.	69	t	+	3.	104	t	+
Va.	14,688	1.	171	1.	171	0	0	2.	342	t	+
W. Va.	4,080	-	-	-	-	2.	115	t	+	t	+
N. C.	4,048	-	-	5.	250	2.	100	6.	300	t	+
S. C.	2,550	-	-	-	-	0	0	-	-	t	+
Ga.	1,725	25.	668	-	-	0	0	1.	27	.5	13
Fla.	1,564	-	-	-	-	0	0	-	-	-	-
Ohio	6,728	-	-	-	-	0	0	-	-	-	-
Ind.	3,570	.1	4	3.	118	0	0	.2	8	t	+
Ill.	6,413	-	-	-	-	0	0	-	-	t	+
Mich.	27,200	t	+	t	+	t	+	5.	2,862	t	+
Wis.	21,420	t	+	t	+	t	+	.1	24	t	+
Minn.	27,525	-	-	t	+	0	0	1.	326	1.	326
Iowa	4,128	-	-	-	-	0	0	6.	281	t	+
Mo.	4,756	-	-	-	-	0	0	-	-	-	-

State	Production 1921 Bushels 000 omitted	Estimated reduction in yield due to disease											
		Mosaic		Leaf roll		Late blight		Rhizoctonia		Black leg			
		%	Bushels 000 omitted	%	Bushels 000 omitted	%	Bushels 000 omitted	%	Bushels 000 omitted	%	Bushels 000 omitted		
N. D.	11,520	-	-	t	+	0	0	.1	12	1.	118		
S. D.	4,400	t	+	t	+	0	0	3.	150	1.	50		
Nebr.	8,160	-	-	t	+	0	0	4.	384	1.	96		
Kans.	4,160	-	-	0	0	0	0	15.	867	2.	115		
Ky.	3,770	15.	942	-	-	t	+	5.	314	t	+		
Tenn.	1,820	5.	106	t	+	t	+	1.	21	0	0		
Ala.	2,400	-	-	t	+	0	0	-	-	-	-		
Miss.	1,088	15.	222	t	+	0	0	t	+	-	-		
La.	1,809	30.	861	t	+	0	0	t	+	0	0		
Texas	2,072	10.	249	t	+	0	0	t	+	-	-		
Okla.	2,088	-	-	-	-	0	0	-	-	-	-		
Ark.	1,815	10.	211	-	-	0	0	t	+	-	-		
Mont.	5,060	10.	625	2.	125	0	0	2.	125	2.	125		
Wyo.	2,052	-	-	-	-	0	0	-	-	-	-		
Colo.	11,070	-	-	-	-	0	0	-	-	-	-		
N.Mex.	296	-	-	-	-	0	0	-	-	-	-		
Ariz.	460	-	-	-	-	0	0	-	-	-	-		
Utah	2,415	12.	374	-	-	0	0	2.5	78	2.	62		
Nev.	592	-	-	-	-	0	0	-	-	-	-		
Ida.	10,545	3.	422	t	+	0	0	8.	1,125	2.	281		
Wash.	7,425	15.	1,505	t	+	t	+	8.	803	1.	100		
Ore.	3,870	1.	44	t	+	t	+	8.	352	1.	44		
Calif.	10,064	.5	69	6.	863	t	+	8.	1,110	-	-		
U. S.	346,823	1.9	8,253	1.4	5,913	.5	2,106	2.7	11,510	.3	1,330		

POTATO (Continued)

Estimated reduction in yield of potatoes due to Fusarium wilt (Fusarium oxysporum), tip-burn and hopper-burn, early blight(Macrosporium solani), and other diseases, 1921.

State	Production 1921 Bushels :000 omitted	Estimated reduction in yield due to disease: Fusarium wilt %	Fusarium wilt Bushels :000 omitted	Tip-burn and hopper-burn %	Tip-burn and hopper-burn Bushels :000 omitted	Early blight %	Early blight Bushels :000 omitted	Other diseases %	Other diseases Bushels :000 omitted	All diseases %	All diseases Bushels :000 omitted
Me.	37,152	0	0	-	-	t	+	-	-	.5	187+
N. H.	2,240	0	0	-	-	t	+	-	-	+:	+
Vt.	3,750	t	+	5.	227	t	+	-	-	17.5+:	795+
Mass.	3,335	-	-	-	-	t	+	-	-	+:	+
R. I.	345	-	-	-	-	t	+	-	-	+:	+
Conn.	2,369	-	-	-	-	t	+	-	-	+:	+
N. Y.	33,990	1.5	585	7.	2,728	-	-	-	-	12.8+:	4,989+
N. J.	9,025	t	+	-	-	3.	334	3.	334	19. +:	2,116+
Pa.	21,586	3.	953	8.	2,540	1.	317	1.	317	32. +:	10,158+
Del.	500	t	+	-	-	t	+	1.	5	1.5+:	8+
Md.	3,185	-	-	-	-	t	+	3.	104	8. +:	277+
Va.	14,688	2.	342	5.	854	1.	171	2.	342	14. +:	2,393+
W. Va.	4,080	-	-	25.	1,436	2.	115	-	-	29. +:	1,666+
N. C.	4,048	3.	150	2.	100	1.	50	-	-	19. +:	950+
S. C.	2,550	2.	52	-	-	t	+	-	-	2. +:	52+
Ga.	1,725	2.	53	1.	27	1.	27	5.	134	35.5	949
Fla.	1,564	-	-	-	-	t	+	-	-	+:	+
Ohio	6,728	5.	488	20.	1,950	1.	97	5.	488	31.	3,023
Ind.	3,570	.5	20	4.	157	1.5	59	-	-	9.3+:	366+
Ill.	6,413	-	-	-	-	-	-	-	-	+:	+
Mich.	27,200	t	+	20.	11,446	10.	5,723	-	-	35. +:	20,031+
Wis.	21,420	t	+	10.	2,437	t	+	2.	487	12.1+:	2,948+
Minn.	27,525	1.	326	10.	3,257	1.5	488	1.	326	15.5+:	5,049+
Iowa	4,128	-	-	-	-	t	+	6.	281	12. +:	562+
Mo.	4,756	-	-	-	-	-	-	-	-	-	-

State	Production 1921 Bushels 000 omitted	Estimated reduction in yield due to disease: Fusarium wilt %	Fusarium wilt Bushels 000 omitted	Tip-burn and hopper-burn %	Tip-burn and hopper-burn Bushels 000 omitted	Early blight %	Early blight Bushels 000 omitted	Other diseases %	Other diseases Bushels 000 omitted	All diseases %	All diseases Bushels 000 omitted
N. D.	11,520	.5	59	-	-	t	+	1.	118	2.6+	307+
S. D.	4,400	-	-	5.	250	2.	100	1.	50	12. +	600+
Nebr.	8,160	10.	960	-	-	-	-	-	-	15. +	1,440+
Kans.	4,160	1.	58	5.	289	5.	289	-	-	28.	1,618
Ky.	3,770	5.	314	-	-	15.	942	-	-	40. +	2,512+
Tenn.	1,820	1.	21	2.	42	5.	106	t	+	14. +	296+
Ala.	2,400	-	-	-	-	-	-	-	-	+	+
Miss.	1,088	.5	7	3.	44	2.	30	6.	89	26.5+	392+
La.	1,809	0	0	2.	57	1.	29	4.	115	37. +	1,062+
Texas	2,072	1.	25	t	+	1.	25	5.	125	17. +	424+
Okla.	2,088	-	-	-	-	-	-	2.	43	2.	43
Ark.	1,815	2.	42	-	-	t	+	2.	42	14. +	295+
Mont.	5,060	3.	187	t	+	0	0	t	+	19. +	1,187+
Wyo.	2,052	-	-	-	-	-	-	-	-	-	-
Colo.	11,070	3.	382	-	-	10.	1,272	-	-	13.	1,654
N.Mex.	296	-	-	-	-	-	-	-	-	-	-
Ariz.	460	-	-	-	-	t	+	-	-	+	+
Utah	2,415	5.	156	-	-	1.	31	-	-	22.5	701
Nev.	592	-	-	-	-	-	-	-	-	-	-
Ida.	10,545	5.	703	t	+	t	+	7.	984	25. +	3,515+
Wash.	7,425	1.	100	t	+	0	0	1.	100	26. +	2,608+
Ore.	3,870	1.	44	t	+	t	+	1.	44	12. +	528+
Calif.	10,064	8.	1,110	-	-	2.	278	3.	417	27.5+	3,817+
U. S.	346,823	1.7	7,137	6.5	27,841	2.5	10,483	1.1	4,945	18.6	79,518

SWEET POTATO

Estimated reduction in yield of sweet potatoes due to stem rot (Fusarium hyperoxysporum and F. batatatis), foot rot (Plenodomus destruens), black rot (Sphaeronema fimbriatum), storage rots, pox (Cystospora batata), and other diseases, 1921.

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to disease: Stem rot %	Stem rot Bushels (000 omitted)	Foot rot %	Foot rot Bushels (000 omitted)	Black rot (Field losses) %	Black rot Bushels (000 omitted)	Storage rot %	Storage rot Bushels (000 omitted)	Pox %	Pox Bushels (000 omitted)	Other diseases %	Other diseases Bushels (000 omitted)	All diseases %	All diseases Bushels (000 omitted)
N. J.	1,870	20.	492	-	-	2.	49	-	-	2.	49	-	-	24.	590
Pa.	248	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Del.	900	8.	83	-	-	1.	10	-	-	2.	21	2.	21	13.	135
Md.	900	5.	48	-	-	1.	10	-	-	-	-	1.	10	7.	68
Va.	4,180	2.	103	-	-	5.	258	10.	516	2.	103	0	0	19.	980
W. Va.	345	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N. C.	10,302	10.	1,610	-	-	6.	966	20.	3,219	0	0	-	-	36.	5,795
S. C.	7,885	-	-	0	0	.5	50	20.	1,996	0	0	.5	50	21.	2,096
Ga.	12,410	1.	180	-	-	7.	1,259	20.	3,597	0	0	3.	540	31.	5,576
Fla.	2,720	t	+	-	-	-	-	-	-	0	0	-	-	+	+
Ohio	321	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ind.	396	1.	4	0	0	1.	4	2.	8	-	-	-	-	4.	16
Ill.	990	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	312	6.	21	-	-	5.	18	-	-	-	-	-	-	11.	39
Mo.	1,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kans.	500	15.	106	t	+	3.	21	10.	70	t	+	1.	7	29.	+ 204+
Ky.	1,872	-	-	-	-	-	-	-	-	0	0	-	-	-	-
Tenn.	4,400	2.	142	2.	142	8.	568	25.	1,774	0	0	1.	71	38.	2,697
Ala.	12,150	-	-	-	-	-	-	20.	3,038	0	0	-	-	20.	3,038
Miss.	8,560	15.	2,986	-	-	15.	2,986	25.	4,977	-	-	2.	398	57.	11,347
La.	8,272	t	+	0	0	3.	310	15.	1,551	t	+	2.	207	20.	+ 2,068+
Texas	8,200	t	+	0	0	5.	488	-	-	1.	98	10.	976	16.	+ 1,562+
Okla.	2,646	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ark.	5,670	2.	167	0	0	5.	417	20.	1,667	t	+	5.	417	32.	+ 2,668+
N.Mex.	126	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ariz.	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calif.	960	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U. S.	98,660	4.3	5,942	.1	142	5.4	7,414	16.3	22,413	.2	271	2.	2,697	28.3	38,879

Estimated percentage reduction in yield of tomatoes due to Septoria blight (Septoria lycopersici), Fusarium wilt (Fusarium lycopersici), bacterial wilt (Bacillus solanacearum), early blight (Macrosporium solani), and other diseases, 1921. (Production figures not available.)

State	Estimated percentage reduction in yield due to disease					
	Septoria blight	Fusarium wilt	Bacterial wilt	Early blight	Other diseases	All diseases
Me.	-	1.	0	-	-	1.
R. I.	-	-	0	t	-	+
Conn.	-	-	0	t	1.	1. +
N. Y.	3.	-	0	t	8.	11. +
N. J.	10.	3.	-	7.	-	20.
Pa.	2.	2.	0	1.	5.	10.
Del.	10.	1.	-	t	-	11. +
Md.	25.	5.	-	2.	-	32.
Va.	15.	5.	1.	1.	10.	32.
W. Va.	20.	t	•	10.	1.	31.
N. C.	10.	6.	4.	t	5.	25. +
S. C.	-	3.	4.	t	5.	12. +
Ga.	.5	25.	7.	-	15.	47.5
Fla.	-	-	-	15.	-	15.
Ohio	4.	15.	-	3.	2.	24.
Ind.	5.	3.	0	t	3.	11. +
Ill.	-	-	-	t	3.	3. +
Mich.	t	t	0	t	1.	1. +
Wis.	t	t	0	t	1.	1. +
Minn.	t	0	0	t	1.	1. +
Iowa	2.	-	-	t	12.	14. +
Kans.	5.	2.	0	0	2.	9.
Ky.	-	25.	0	t	15.	40. +
Tenn.	10.	10.	t	t	6.	26. +
Ala.	-	-	-	5.	-	5.
Miss.	1.	20.	1.	5.	20.	47.
La.	0	25.	1.	10.	10.	46.
Texas	3.	5.	t	2.	5.	15. +
Okla.	2.	-	-	-	5.	7.
Ark.	2.	20.	t	t	6.	28. +
Mont.	0	0	0	0	2.	2.
Wyo.	0	0	0	0	-	-
Colo.	-	0	0	0	-	-
N.Mex.	0	0	-	0	-	-
Ariz.	0	0	-	-	-	-
Utah	0	0	0	0	-	-
Nev.	0	0	0	0	-	-
Ida.	0	0	0	0	25.	25.
Wash.	0	0	0	0	10.	10.
Ore.	0	0	0	0	4.	4.
Calif.	-	-	0	4.	15.	19.

DRY BEANS

Estimated reduction in yield of dry beans due to anthracnose (Colletotrichum lindemuthianum), bacterial blight (Bacterium phaseoli), mosaic, root rots, and other diseases, 1921

State	Production 1921 Bushels (000 omitted)	Estimated reduction in yield due to disease													
		Anthracnose		Bacterial blight		Mosaic		Root rots		Other diseases		All diseases			
		%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%	Bushels (000 omitted)	%		Bushels (000 omitted)	
N. Y.	1,072	4.	49	4.	49	3.	37	2.	25	-	-	13.		160	
Mich.	2,972	t	+	25.	991	t	+	-	-	t	+	25.	+	991	+
Colo.	342	0	0	-	-	-	-	-	-	t	+		+		+
N.Mex.	830	0	0	-	-	-	-	-	-	-	-	-		-	
Ariz.	68	0	0	-	-	-	-	-	-	-	-	-		-	
Ida.	216	0	0	t	+	10.	24	2.	5	-	-	12.	+	29	+
Calif.	3,618	0	0	-	-	-	-	5.	197	3.	118	8.		315	
U. S.	9,118	.5	49	9.8	1,040	.6	61	2.1	227	1.1	118	14.1		1,495	

COTTON

Estimated reduction in yield of cotton due to anthracnose (*Colletotrichum gossypii*), angular leaf spot (*Bacterium malvacearum*), Fusarium wilt (*Fusarium vasinfectum*), root knot (*Heterodera radicicola*), and other diseases, 1921.

State	Production 1921 Bales (000 omitted)	Estimated reduction in yield due to disease: Anthracnose %	Anthracnose Bales (000 omitted)	Leaf spot %	Leaf spot Bales (000 omitted)	Fusarium wilt %	Fusarium wilt Bales (000 omitted)	Root knot %	Root knot Bales (000 omitted)	Other diseases %	Other diseases Bales (000 omitted)	All diseases %	All diseases Bales (000 omitted)
Va.	16	-	-	-	-	-	-	-	-	-	-	-	-
N. C.	800	-	-	1.	9	10.	93	1.	9	2.	19	14.	130
S. C.	760	2.	17	1.	8	4.	34	1.	8	2.	17	10.	84
Ga.	840	3.	29	2.	19	3.	29	2.	19	2.	19	12.	115
Fla.	13	-	-	-	-	-	-	-	-	-	-	-	-
Mo.	78	-	-	-	-	-	-	-	-	-	-	-	-
Tenn.	340	3.	11	1.	3	t	+	t	+	t	+	4.+	14+
Ala.	635	-	-	-	-	-	-	-	-	-	-	-	-
Miss.	870	3.	30	2.	20	5.	50	1.	10	2.	20	13.	130
La.	295	3.	11	2.	7	5.	17	t	+	5.	17	15.+	52+
Texas	2,200	1.	30	3.	91	2.	60	1.	30	20.	603	27.	814
Okla.	530	1.	6	5.	31	-	-	1.	6	8.	50	15.	93
Ark.	860	2.	20	2.	20	6.	59	1.	10	2.	20	13.	129
Ariz.	40	-	-	10.	5	t	+	-	-	5.	2	15.+	7+
Calif.	50	-	-	-	-	-	-	-	-	-	-	-	-
Others	13	-	-	-	-	-	-	-	-	-	-	-	-
U. S.	8,340	1.6	154	2.1	213	3.5	342	.9	92	7.7	767	15.8	1,568

Estimated reduction in yield of apples due to bitter rot (Glomerella cingulata), black rot (Physalospora cydoniae), blotch (Phyllosticta soliteria), and cedar rust (Gymnosporangium juniperi-virginianae), 1921.

State	Production 1921 (000 omitted)	Estimated reduction due to disease: Bitter rot %	Bitter rot (000 omitted)	Black rot %	Black rot (000 omitted)	Blotch %	Blotch (000 omitted)	Cedar rust %	Cedar rust (000 omitted)
Me.	4,060	0	0	-	-	0	0	0	0
N. H.	700	0	0	-	-	0	0	*0	0
Vt.	600	0	0	-	-	0	0	0	0
Mass.	1,125	0	0	1.	11	0	0	t	+
R. I.	63	0	0	1.	.6	0	0	t	+
Conn.	758	0	0	1.	9	0	0	t	+
N. Y.	12,557	0	0	.5	71	0	0	.5	71
N. J.	667	t	+	2.	15	1.	7	t	+
Pa.	2,208	t	+	1.	28	1.	28	t	+
Del.	68	t	+	1.	.7	.5	.4	t	+
Md.	225	.5	1	5.	13	1.	3	1.	3
Va.	708	.5	4	5.	41	t	+	1.	8
W. Va.	420	.5	2	5.	25	1.	5	1.	5
N. C.	593	3.	26	5.	44	10.	89	5.	44
S. C.	293	5.	17	-	-	-	-	2.	7
Ga.	698	4.	34	1.	9	1.	9	1.	9
Ohio	3,390	t	+	5.	207	2.	83	.5	20
Ind.	1,029	*0	0	3.	35	2.	24	t	+
Ill.	2,381	t	+	2.	64	7.	226	t	+
Mich.	6,317	0	0	t	+	0	0	0	0
Wis.	1,050	0	0	t	+	0	0	.5	6
Minn.	900	0	0	t	+	0	0	1.	9
Iowa	630	0	0	1.	8	t	+	t	+
Mo.	480	1.	6	-	-	3.	17	.5	3
N. D.	-	0	0	t	+	0	0	*0	0
S. D.	126	0	0	t	+	0	0	*	-
Nebr.	125	0	0	t	+	4.	5	t	+
Kans.	172	0	0	t	+	5.	10	t	+
Ky.	636	1.	7	2.	14	5.	35	*-	-
Tenn.	754	8.	72	1.	9	5.	45	t	+
Ala.	890	3.	28	t	+	-	-	*-	-
Miss.	145	3.	5	t	+	4.	7	.5	1
La.	35	3.	1	-	-	10.	4	*-	-
Texas	274	t	+	1.	3	3.	9	t	+
Okla.	486	0	0	3.	17	10.	58	*-	-
Ark.	120	1.	1	t	+	3.	4	*0	0
Mont.	975	0	0	0	0	0	0	0	0
Wyo.	19	0	0	0	0	0	0	0	0
Colo.	3,200	0	0	0	0	0	0	0	0
N.Mex.	483	0	0	0	0	0	0	0	0
Ariz.	47	0	0	0	0	0	0	0	0
Utah	1,037	0	0	0	0	0	0	0	0
Nev.	24	0	0	0	0	0	0	0	0
Ida.	4,280	0	0	t	+	0	0	0	0
Wash.	29,062	0	0	0	0	0	0	0	0
Oreg.	5,571	0	0	*0	0	0	0	0	0
Calif.	6,500	0	0	0	0	0	0	0	0
U. S.	96,881	.2	204	.5	624	.6	668	.2	186

Estimated reduction in yield of apples due to fire blight (*Bacillus amylovorus*), scab (*Venturia inaequalis*), and other diseases, 1921.

State	Production 1921	Estimated reduction in yield due to disease									
		Fire blight		Scab		Other diseases		All diseases			
	Bus. (000 omitted)	%	Bus. (000 omitted)	%	Bus. (000 omitted)	%	Bus. (000 omitted)	%	Bus. (000 omitted)	%	Bus. (000 omitted)
Me.	4,060	-	-	-	-	-	-	-	-	-	-
N. H.	700	-	-	-	-	-	-	-	-	-	-
Vt.	600	1.	6	2.	12	-	-	3.	18		
Mass.	1,125	-	-	-	-	1.	11	2. +	22+		
R. I.	63	-	-	-	-	1.	.6	2. +	1.2+		
Conn.	758	-	-	12.	105	1.	9	14. +	123+		
N. Y.	12,557	3.	423	5.	705	2.	282	11.	1,552		
N. J.	667	t	+	3.	21	2.	15	8. +	58+		
Pa.	2,208	1.	28	15.	419	3.	84	21. +	587+		
Del.	68	t	+	2.	1.4	1.	.7	4.5+	3.2+		
Md.	225	2.	5	4.	11	2.	5	15.5+	41+		
Va.	708	t	+	4.	32	2.	16	12.5+	101+		
W. Va.	420	t	+	5.	25	2.	10	14.5+	72+		
N. C.	593	8.	71	-	-	2.	18	33.	292		
S. C.	293	6.	21	-	-	2.	7	15.	52		
Ga.	698	4.	34	5.	43	3.	26	19.	164		
Ohio	3,390	.5	20	8.	331	2.	83	18. +	744+		
Ind.	1,029	t	+	5.	59	3.	35	13. +	153+		
Ill.	2,381	.1	3	12.	387	5.	161	26.1+	841+		
Mich.	6,317	5.	343	2.	137	1.	69	8. +	549+		
Wis.	1,050	5.	59	5.	59	1.	12	11.5+	136+		
Minn.	900	1.	9	1.	9	1.	9	4. +	36+		
Iowa	630	1.	8	10.	76	5.	38	17. +	130+		
Mo.	480	t	+	5.	28	5.	28	14.5+	82+		
N. D.	-	t	+	-	-	-	-	+	+		
S. D.	126	t	+	-	-	-	-	+	+		
Nebr.	125	t	+	-	-	3.	4	7. +	9+		
Kans.	172	1.	2	1.	2	5.	10	12. +	24+		
Ky.	636	t	+	-	-	2.	14	10. +	70+		
Tenn.	754	t	+	t	+	2.	18	16. +	144+		
Ala.	890	-	-	-	-	3.	28	6. +	56+		
Miss.	145	8.	15	t	+	5.	9	20.5+	37+		
La.	35	-	-	-	-	5.	2	18.	7		
Texas	274	1.	3	0	0	6.	18	11. +	33+		
Okla.	486	t	+	1.	6	2.	12	16. +	93+		
Ark.	120	0	0	t	+	4.	5	8. +	10+		
Mont.	975	3.	31	1.	10	-	-	4.	41		
Wyo.	19	-	-	-	-	-	-	-	-		
Colo.	3,200	-	-	-	-	-	-	-	-		
N.Mex.	483	-	-	-	-	-	-	-	-		
Ariz.	47	-	-	-	-	-	-	-	-		
Utah	1,037	-	-	-	-	-	-	-	-		
Nev.	24	-	-	-	-	-	-	-	-		
Ida.	4,280	.5	24	1.	47	8.	378	9.5+	449+		
Wash.	29,062	t	+	8.	2,673	5.	1,670	13. +	4,343+		
Ore.	5,571	t	+	15.	1,032	4.	275	19. +	1,307+		
Calif.	6,500	-	-	-	-	-	-	-	-		
U. S.	96,881	1.	1,105	5.7	6,230	3.1	3,362	11.3	12,380		

Estimated reduction in yield of peaches due to leaf curl (Exoascus deformans), brown rot (Sclerotinia cinerea), and other diseases, 1921

State	Production 1921 (Bus. 000 omitted)	Leaf curl %	Leaf curl (Bus. 000 omitted)	Brown rot %	Brown rot (Bus. 000 omitted)	Other diseases %	Other diseases (Bus. 000 omitted)	All diseases %	All diseases (Bus. 000 omitted)
N. H.	29	-	-	-	-	-	-	-	-
Mass.	185	-	-	5.	10	1.	2	6.	12
R. I.	12	-	-	5.	.7	2.	.2	7.	.9
Conn.	290	t	+	8.	26	2.	6	10. +	32+
N. Y.	1,700	1.	17.5	1.	17.5	1.	17.5	3.	52.5
N. J.	347	t	+	1.	4	2.	7	3. +	11+
Pa.	350	3.	13	10.	41	3.	13	16.	67
Del.	7	-	-	-	-	3.	.2	3.	.2
Md.	59	-	-	-	-	4.	2	4.	2
Va.	52	t	+	1.	1	4.	2	5. +	3+
W. Va.	48	-	-	-	-	3.	1	3.	1
N. C.	644	t	+	25.	215	-	-	25. +	215+
S. C.	566	-	-	20.	155	7.	54	27.	209
Ga.	6,550	t	+	15.	1,293	9.	775	24. +	2,068+
Fla.	130	-	-	-	-	-	-	-	-
Ohio	335	.5	1	5.	19	5.	19	10.5	39
Ind.	26	.5	.1	t	+	2.	.5	2.5+	.6+
Ill.	76	1.	1	-	-	2.	2	3.	3
Mich.	358	t	+	-	-	-	-	+	+
Iowa	85	1.	1	-	-	-	-	1.	1
Mo.	0	.5	-	-	-	-	-	.5	-
Nebr.	0	t	+	0	0	-	-	+	+
Kans.	24	t	+	0	0	-	-	+	+
Ky.	80	-	-	-	-	1.	1	1.	1
Tenn.	320	t	+	10.	36	t	+	10. +	36+
Ala.	1,230	-	-	15.	217	-	-	15.	217
Miss.	322	1.	5	20.	93	10.	47	31.	145
La.	264	0	0	25.	94	5.	19	30.	113
Texas	2,200	-	-	3.	76	10.	253	13.	329
Okla.	360	t	+	2.	8	5.	19	7. +	27+
Ark.	435	1.	4	1.	4	1.	5	3.	13
Colo.	860	0	0	0	0	5.	45	5.	45
N.Mex.	8	0	0	0	0	-	-	-	-
Ariz.	54	0	0	0	0	-	-	-	-
Utah	763	-	-	0	0	t	+	+	+
Nev.	4	-	-	0	0	-	-	-	-
Ida.	150	t	+	0	0	3.	5	3. +	5+
Wash.	772	2.	17	1.	8	5.	42	8.	67
Ore.	190	15.	45	2.	6	20.	61	37.	112
Calif.	12,848	1.	149	3.	448	10.	1,494	14.	2,091
U. S.	32,733	.6	254	7.2	2,772	7.5	2,892	15.3	5,918

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